## (19) World Intellectual Property **Organization** International Bureau



## i **e**ni cultur i eni cultura di la completa del completa di la completa del completa del completa del completa del

(43) International Publication Date 27 January 2005 (27.01.2005)

## (10) International Publication Number WO 2005/007073 A2

(51) International Patent Classification7:

**A61K** 

(21) International Application Number:

PCT/IL2004/000644

(22) International Filing Date:

15 July 2004 (15.07.2004)

(25) Filing Language:

English

(26) Publication Language:

**English** 

(30) Priority Data:

60/487,623 60/503,884

17 July 2003 (17.07.2003) US 22 September 2003 (22.09.2003) US

161903

10 May 2004 (10.05.2004)

(71) Applicant (for all designated States except US): GAMIDA-CELL LTD. [IL/IL]; 5 Nahum Hafzadi Street, Ofer Building, Givat Shaul, 95 484 Jerusalem (IL).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARIKOVSKY, Moshe [IL/IL]; 9b Shazar Street, 76 804 Mazkeret Batya (IL). PELED, Tony [IL/IL]; 19 Bareket Street, 90 805 Mevaseret Zion (IL). GRYNSPAN, Frida [IL/IL]; 9/1 Meron Street, 90 805 Mevasseret Zion (IL). HASSON, Arik [IL/IL]; 25 Herzi Street, 55210 Kiryat-Ono (IL).

- (74) Agent: G. E. EHRLICH (1995) LTD.; 11 Menachem Begin Street, 52 521 Ramat-Gan (IL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: EX VIVO PROGENITOR AND STEM CELL EXPANSION FOR USE IN THE TREATMENT OF DISEASE OF EN-DODERMALLY-DERIVED ORGANS

(57) Abstract: Methods of ex-vivo expansion of endodermally-derived and non-endodermally-derived progenitor and stem cells, expanded populations of renewable progenitor and stem cells and to their uses in therapeutic applications such as the production of endocrine hormones and the prevention and treatment of liver and pancreatic disease.